

Request for Programming in 2010 SHOPP (Small Value Capital Project)

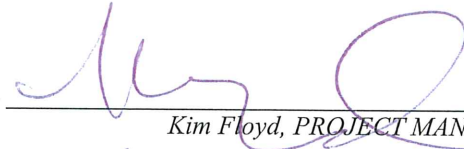
PROJECT LOCATION: In Humboldt County within Arcata from 11th Street Overcrossing to Arcata Overhead.

APPROVAL RECOMMENDED:



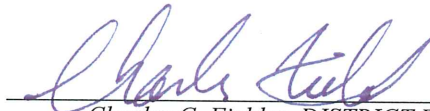
Ralph Martinelli, DISTRICT PROGRAM MANAGER

APPROVAL RECOMMENDED:



Kim Floyd, PROJECT MANAGER

APPROVED:



Charles C. Fielder, DISTRICT DIRECTOR

11/17/2011
DATE

This project initiation document has been prepared under the direction of the following Registered Civil Engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.



Dennis P. McBride, REGISTERED CIVIL ENGINEER

11-16-2011
DATE



Initiating Office/Initiator:

The District Program Manager for the SHOPP Collision Reduction Program has established that a project is needed that meets the qualification for 201.010 Safety Improvement Category.

It is proposed that this project be amended into the 2010 State Highway Operation and Protection Program (SHOPP). A project report will serve as final approval of the proposal.

Purpose and Need:

Purpose: The purpose of this project is to reduce the potential for cross median collisions. There is three beam median barrier both to the north and the south of this project. The District 1 Traffic Safety Office determined that this 1.6 mile gap in median barrier should be closed utilizing the Gap Closure Warrant of the Median Barrier Monitoring Report.

Need: This location was identified as having a gap in existing median barrier. This project will reduce the potential for cross median collisions.

Deficiency Summary:

This location was identified as having a gap in existing median barrier.

Project Proposal:

This safety project proposes to install cable median barrier in the existing gap and will upgrade the bridge column guardrail at six overcrossings. The project will retain existing emergency vehicle crossings. A concrete pad will be placed under the cable median barrier to preclude weed growth. Field review indicates that most of the median planting has grown to the point that they now are considered fixed objects. These plants will be removed under this project. Existing pine trees near the north end of the project will be shielded from southbound traffic. They are beyond the Clear Recovery Zone for northbound traffic. Shielding the existing pine trees within the median was discussed with the Design Coordinator, Jim Deluca, on September 15, 2011 and it was agreed that a Design Exception Fact Sheet would not be necessary. A memo to file was prepared to document this decision.

Cable median barrier (CMB) was selected for this location because of its ability to minimize visual impacts along the roadway through Arcata, to enable quick maintenance repairs, and to maintain direct emergency vehicle access through the median. In addition the CMB is more economical than concrete or three beam median barrier.

R/W:

All work will be conducted within the state highway right of way. The Design Engineer has consulted with the Eureka Right of Way Project Development Team and has received a commitment that additional right of way will not be required.

Disposal Site:

A disposal site is not needed.

Utilities:

Utility verification for city of Arcata utilities will be required. No utilities are expected to be affected by this project. The cable median barrier posts and post sleeves extend only 16 inches deep into the ground. In the event a utility is in conflict the cable median barrier post locations will be adjusted as needed.

Environmental:

Environmental performed a preliminary review of the project determined a cultural resource evaluation including a field review, Native American consultation, and preparation of a screening memo would be needed. It is not anticipated the project would affect any federally or state listed species. The presence or absence of any wetlands or sensitive plants in the work area will need to be confirmed. The probable NEPA/CEQA document is a CE/CE.

The project location is not in the Coastal Zone. Median vegetation removal will be restricted to the permissible Migratory Bird Treaty Act work window, or require a biological survey.

Sea Level Rise:

This project is not located where sea level rise will occur according to Pacific Institute mapping.

Programming:

See attached Programming Sheet, Attachment D, for Project Capital Cost, Project Support Components, and Schedule.

Key assumptions for the cost estimate:

- 1- R/W is not required.
- 2- Unit Cost of cable median barrier is estimated in accordance with recent bid results.

- 3- Thirty percent contingency to allow for a bidding environment that may be influenced by an improving economy.

Key assumptions for support cost estimate.

- 1- Resource estimates provided by Design. All other resource estimates generated by XPM.
- 2- Significant line item allocations in the resources sheets were reviewed and adjusted to meet project needs.

Key assumptions for the schedule:

- 1- Eight months given to process environmental document.
- 2- AADD Project.

Cost Estimate:

The District recommends that this project be programmed for \$799,000 in construction costs and for \$0 in Right of Way cost in FY 2012/2013. This project qualifies for funding through the 20.10.201.010 Safety Improvement Program and is eligible for Federal Funding. For a detailed cost estimate see Attachment C.

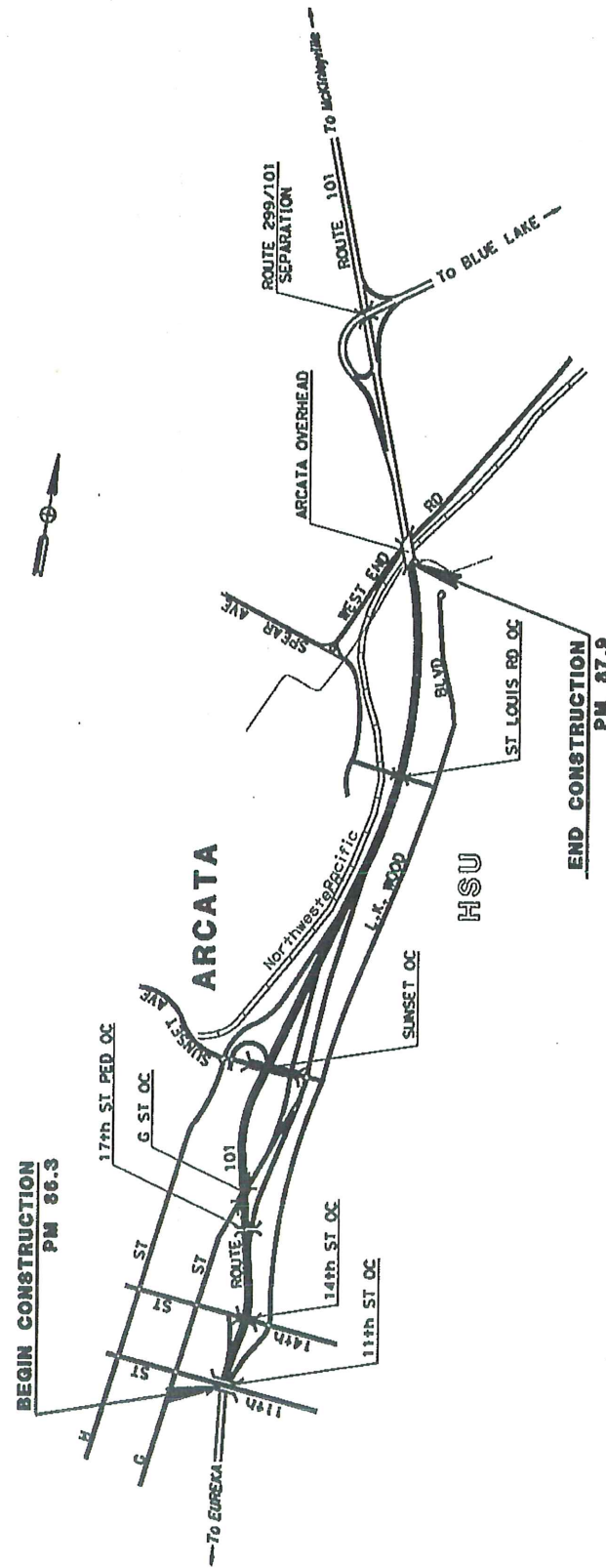
Attachments:

Attachment A – Location Map
Attachment B – Typical Cross-section
Attachment C – Preliminary Cost Estimate
Attachment D – Programming Sheet

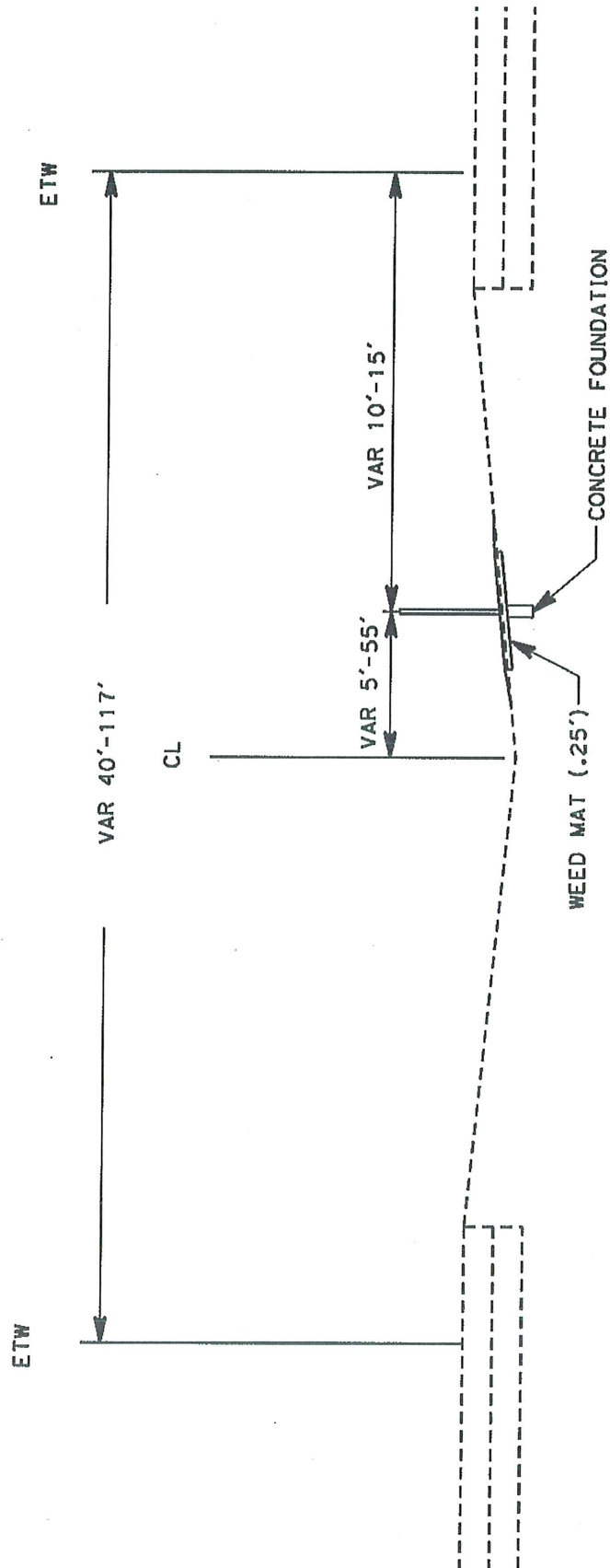
DESIGN	COUNTY	ROUTE	PROJECT	DATE
01	101	101	06.3 / 07.9	

REGISTERED CIVIL ENGINEER STATE OF CALIFORNIA
 PROJECT: 06.3 / 07.9
 IN THE COUNTY OF CALIFORNIA
 I, _____, DO HEREBY CERTIFY THAT I AM A REGISTERED CIVIL ENGINEER IN THE STATE OF CALIFORNIA AND I HAVE EXAMINED THE PROJECT AND I AM Satisfied THAT THE PROJECT IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA HIGHWAY PRACTICE ACT.

ATTACHMENT A



LOCATION MAP



TYPICAL CROSSSECTION

Preliminary Estimate of Cost

9/19/2011

File: 01-HUM-101- PM 86.33/87.84

Description: Cable Median Barrier

ITEM #	ITEM DESCRIPTION	QUANTITY	UNIT	PRICE	AMOUNT
74017	Prepare WPC Program	1	LS	\$1,100	\$1,100
74020	Water Pollution Control	1	LS	\$5,000	\$5,000
210430	Hysroseed	1	LS	\$20,000	\$20,000
120090	Construction Area Signs	1	LS	\$5,000	\$5,000
	Construction Site Management	1	LS	\$5,000	\$5,000
	Aerial Deposited Lead Plan	1	LS	\$2,000	\$2,000
	Portable Concrete Washout	2	EA	\$1,500	\$3,000
128650	PCMS	2	EA	\$2,000	\$4,000
	Clearing and Grubbing	1	LS	\$10,000	\$10,000
	Cable Median Barrier	7,920	LF	\$15	\$118,800
	Cable Barrier Anchor	4	EA	\$2,500	\$10,000
	Minor Concrete (Weed Barrier)	5,280	SY	\$50	\$264,000
150662	Remove Metal Beam Guard Railing	960	LF	\$7	\$6,720
832003	Metal Beam Guard Railing (Wood Post)	260	LF	\$40	\$10,400
839220	Double Metal Beam Guard Railing	195	LF	\$40	\$7,800
839566	Terminal System (Type CAT) w/ Backup	9	EA	\$4,650	\$41,850
839581	End Anchor Assembly (Type SFT)	7	EA	\$650	\$4,550
			<u>Subtotal</u>		\$519,220
120100	Traffic Control System (5% item cost)	1	LS	\$25,961	\$25,961
	Maintain Traffic (5% item cost)	1	LS	\$25,961	\$25,961
			<u>Subtotal</u>		\$571,142
	Misc. Minor Items			(5% Subtotal)	\$28,557
	Contingencies (30%)				\$171,343
			TOTAL=		\$772,000

* Cable Barrier prices taken from recent District 2 project

PROGRAMMING SHEET - 2011/2012
ATTACHMENT D

 EA: 01-0B100
 Proj Name: No Nick

 Project Manager: Kim Floyd
 Co-Rte-PM: HUM-101- 086.3/ 087.8

 Date: 11/16/2011
 Type: SHOPP

PROJECT SCHEDULE

MILESTONE		DATE (STATUS)
Begin Environmental Document	M020	02/15/2012 (T)
Begin Project Report	M040	02/15/2012 (T)
Circulate Environmental Document (DED)	M120	
Project Approval & Environmental Document (PA&ED)	M200	08/01/2012 (T)
District Submits Bridge Site Data to Structures	M221	
Right of Way Maps	M224	
Regular Right of Way	M225	
District Plans, Specifications & Estimates to DOE	M377	10/01/2012 (T)
Draft Structures Plans, Specifications & Estimates	M378	
District Plans, Specifications & Estimates (PS&E)	M380	12/01/2012 (T)
Right of Way Certification	M410	02/01/2013 (T)
Ready to List (RTL)	M460	02/01/2013 (T)
Headquarters Advertise (HQ AD)	M480	03/01/2013 (T)
Approve Construction Contract	M500	06/01/2013 (T)
Contract Acceptance (CCA)	M600	10/01/2013 (T)
End Project	M800	02/01/2015 (T)

ESTIMATE	DATE	AMOUNT
ROADWAY	09/27/11	\$ 772
BRIDGE		\$ 0
Subtotal Const		\$ 772
RIGHT OF WAY		\$ 0
MITIGATION		\$ 0
Subtotal RW		\$ 0
GRAND TOTAL		\$ 772

EXISTING PROGRAMMING	
PAED	\$
PS&E	\$
RW - Sup	\$
RW - Cap	\$
Const - Sup	\$
Const - Cap	\$

*Does not apply to RW Capital + Not Escalated ++ Only Escalated to 1 year into Future

PROJECT COSTS BY SB45 CATEGORY

CAPITAL COST ESTIMATE (Escalation Factor)	Prior Yrs+	11/12+	12/13 (3.5%)	13/14 (3.5%)	14/15 (3.5%)	15/16 (3.5%)	Future++ (3.5%)	Total
Right of Way								\$ 0
Construction			799					\$ 799
CAPITAL COSTS TOTAL								\$ 799
SUPPORT COSTS (Escalation Factor)			(1.5%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)	Sup/Cap
PAED		111	23					\$ 134 16.79%
PS&E		34	233					\$ 267 33.41%
Right of Way		1	5	5	3			\$ 14 1.69%
Construction			30	100	4			\$ 134 16.81%
SUPPORT COSTS TOTAL								\$ 549 68.70%
TOTAL PROJECT COSTS								\$ 1,348

PROJECT SUPPORT IN PYS

	Prior Yrs	11/12	12/13	13/14	14/15	15/16	Future	Total	PY %
Environmental	0.00	0.29	0.15	0.01	0.00	0.00	0.00	0.45	11.25%
Design	0.00	0.26	0.43	0.02	0.00	0.00	0.00	0.71	17.75%
Engineering Services	0.00	0.05	0.32	0.06	0.00	0.00	0.00	0.43	10.75%
Surveys	0.00	0.14	0.17	0.10	0.01	0.00	0.00	0.42	10.50%
Right of Way	0.00	0.02	0.04	0.01	0.01	0.00	0.00	0.08	2.00%
Traffic	0.00	0.04	0.09	0.03	0.00	0.00	0.00	0.16	4.00%
Construction	0.00	0.01	0.15	0.41	0.00	0.00	0.00	0.57	14.25%
Project Management	0.00	0.14	0.15	0.04	0.02	0.00	0.00	0.35	8.75%
District Units*	0.00	0.30	0.18	0.01	0.00	0.00	0.00	0.49	12.25%
Subtotal Dist/Region Resources	0.00	1.25	1.68	0.69	0.04	0.00	0.00	3.66	91.50%
59-DES Project Development	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.05	1.25%
59-DES Structures Foundation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-Office Engineer	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.29	7.25%
59-DES Project Management	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-DES Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-DES Other Units**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
Subtotal DES Resources	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.34	8.50%
TOTAL PYs	0.00	1.25	2.02	0.69	0.04	0.00	0.00	4.00	

*Admin, PIng, Maintenance

**DES Admin, DES PIng, DES Maintenance

HRS/PYS = 1758

Comments: